

## REMARKS

1. Claim 1-12 are pending in the application. Claims 13-16 have been withdrawn from consideration. (Claims 17-20 were previously cancelled by Amendment). New Claim 21 has been added. Claims 1-6 and 10-12 were previously allowed. In view of the foregoing amendments and following remarks, Applicant requests reexamination of the application.

2. Claim Rejections under §103a. Claim 7 stands rejected over Casolo (U.S. Patent 3,985,648) in view of Hong (U.S. Patent 5,665,240). Applicant respectfully traverses this rejection. Independent Claim 7 has been amended to recite an adsorption apparatus for the treatment of wastewater without the use of ion exchange techniques. Casolo discloses the use of cation and anion exchange resins. As noted by Applicant's Background, at page 1, lines 17-20, such ion exchange techniques are disadvantageous in known wastewater treatment systems in that they produce a concentrated waste requiring further treatment. More specifically, the ion columns become fouled and have to be flushed with a solution, such as a brine solution and forced to a separate chamber. Applicant's invention advantageously eliminates this extra cost as recited in the negative limitation in the preamble of claim 7. Hong does not teach or suggest this combination of elements.

In a brief telephone discussion with Examiner Cintins, the suggestion was raised that the amendments above might raise new matter issues. However, it is Applicant's view that a rejection based on new matter or the written description requirement here is wholly inappropriate. The test for whether a proposed amendment would constitute new matter is whether "persons of ordinary skill in the art would recognize from the disclosure that applicant's invention included those limitations." MPEP 2163, citing *In re Smythe*, 480 F.2d 1376, 178 USPQ 179 (CCPA 1973). Further: The description requirement is not met if the application does not expressly or inherently disclose the claimed invention. *In re Lukach*, 169 USPQ 795 (CCPA 1971). Express recitation of a limitation is not required if the limitation is inherently disclosed in the application.

Here, Applicant clearly states in the background that such ion exchange techniques are undesirable, and the rest of the specification and drawings of the invention do not show an adsorption apparatus for treatment of wastewater that has such ion exchange techniques. In short, a person skilled in the art of would readily recognize in Applicant's disclosure a description of the invention defined by this claim element- an adsorption apparatus that does not use ion exchange techniques for treatment of wastewater. Applicant therefore respectfully requests that the rejection to Claim 7 be withdrawn and the claim be allowed.

3. Claim 8 stands rejected over Casolo (U.S. Patent 3,985,648) and Hong, and further in view of Jensen et al (U.S. Patent 6,706,195). Applicant respectfully traverses this rejection. Claim 8 has been amended in the same manner as claim 7, and now recites an adsorption system for treatment of wastewater without the use of ion exchange techniques. This feature is not taught or suggested by Casolo in view of Hong. Nothing in Jensen et al teaches or suggests the combination of elements recited in claim 8. Applicant therefore respectfully requests that the rejection be withdrawn.

4. Claim 9 stands rejected over Casolo (U.S. Patent 3,985,648) and Hong, and further in view of Faylor (U.S. Patent 3,870,033). Applicant respectfully traverses this rejection. Claim 9 has been amended in the same manner as claim 7, and now recites an adsorption system for treatment of wastewater without the use of ion exchange techniques. This feature is not taught or suggested by Casolo in view of Hong. Nothing in Faylor teaches or suggests the combination of elements recited in claim 8. Faylor specifically shows ion exchanges 52 and 54. Applicant therefore respectfully requests that the rejection be withdrawn and the claims be allowed.

5. New Claim 21. New Claim 21 is similar to previously amended claim 9 which stood rejected over Casolo (U.S. Patent 3,985,648) and Hong, and further in view of Faylor (U.S. Patent 3,870,033), but with the additional limitation now added that the oxidizer is potassium permanganate. This combination of features is not taught or

suggested in the art of record. Applicant respectfully requests that this claim be allowed.

### CONCLUSION

In view of the foregoing amendments and remarks, Applicant requests withdrawal of the rejection of the claims and allowance of the application.

Respectfully Submitted,

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### CERTIFICATE OF FACSIMILE

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